We claim:

1. A peptide comprising an amino acid sequence selected from the group consisting of:
   (SEQ ID NO:59) NQQRLNSWGCKGRIICYTSARWH,
   (SEQ ID NO:61) EQQRLNSWGCKGRIICYTSARWH,
   (SEQ ID NO:69) GRETLMQDQQRLNSWGCKGRIICYTSARWH
   (SEQ ID NO:60) XQQRLNSWGCKGRIICYTSARWH,
   (SEQ ID NO:62) ETLMQXQQRLNSWGCKGRIICYTSARWH,
   (SEQ ID NO:64) RARLQALETLMQNQQRLNSWGCKGRIICYTSARWH,
   (SEQ ID NO:65) DQQVNNVSSIIYDKILEAQDQQEENVRELLELD and functional derivatives thereof.

2. The peptide of claim 1 wherein said peptide is antigenic.

3. The peptide of claim 1 wherein said peptide binds anti-HIV group O antibodies.

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~~4. An antibody raised against the peptide of claim 1.~~

5. The peptide of claim 1 wherein said peptide is made by recombinant or synthetic chemistry methods.

6. A nucleic acid sequence that encodes the peptide of claim 1.

7. A vector for expression containing the nucleic acid sequence of claim 6.

8. A host cell containing the expression vector of claim 8.

9. A process for expression of a peptide in a recombinant host cell, comprising: (a) transferring the expression vector of claim 7 into suitable

host cells, and (b) culturing the host cells of step (a) under a condition which allows expression of the peptide from the expression vector.

10. A test kit comprising one or more peptides selected from the group consisting of:
(SEQ ID NO:59) NQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:61) EQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:69) GRETLMQDQQRLNSWGCKGRIICYTSARWH
(SEQ ID NO:60) XQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:62) ETLMQXQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:64) RARLQALETLMQNQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:65) DQQVNNVSSIIYDKILEAQDQQEENVRELLELD and, functional derivatives thereof, antibodies that bind to said peptides, and antibodies that bind to said functional derivatives thereof.

11. An in vitro diagnostic assay method comprising contacting a sample with one or more peptides selected from the group consisting of:
(SEQ ID NO:59) NQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:61) EQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:69) GRETLMQDQQRLNSWGCKGRIICYTSARWH
(SEQ ID NO:60) XQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:62) ETLMQXQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:64) RARLQALETLMQNQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:65) DQQVNNVSSIIYDKILEAQDQQEENVRELLELD and,
and functional derivatives thereof and determining binding between said peptide and an antibody.

12. An in vitro diagnostic assay method comprising contacting a sample with one or more antibodies raised against a peptide of claim 1 or a functional

derivative thereof and determining binding between said antibodies and an antigen.

13. A mosaic comprising a recombinant group M gp 41 protein wherein a group M immunodominant region has been replaced by one or more O-like immunodominant sequences.

14. The mosaic of claim 13 wherein the O-like immunodominant sequence is selected from the group consisting of:
(SEQ ID NO:59) NQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:61) EQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:69) GRETLMQDQQRLNSWGCKGRIICYTSARWH
(SEQ ID NO:60) XQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:62) ETLMQXQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:64) RARLQALETLMQNQQRLNSWGCKGRIICYTSARWH,
(SEQ ID NO:65) DQQVNNVSSIIYDKILEAQDQQEENVRELLELD and,
and functional derivatives thereof.

15. A mosaic comprising a recombinant group M gp 41 protein wherein a group M immunodominant region has been replaced by one or more O-like immunodominant sequences wherein said mosaic is selected from the group consisting of:
(SEQ ID NO:66) ARLLLSGIVQQQNNLLRAIEAQQHMLQLTAWGIKQL
RARLQALETLMQNQQRLNSWGCKGRIICYTSARWHASWSNKSLEDIW
DNMTWMQWDQQVNNVSSIIYDKILEAQDQQEENVRELLELDKWASLW
NWFDITNWLWYIKIFIMIVGGLVGLRIVFAVLSIVNRVRQGYSPLSLQTRP
PVPRGPDRPEGIEEEGGERDRDTSGRLVHGFLAIIWVDL

and

(SEQ ID NO:67) ARLLLSGIVQQQNNLLRAIEAQQHMLQLTAWGIKQLRA
RLQALETLMQNQQRLNSWGCKGRIICYTSARWHASWSNKSLEDIWDNMT
WMQWDQQVNNVSSIIYDKILEAQDQQEENVRELLELDKWASLWNWFDITN
WLWYIKIFIMIV.